THAT WHICH IS CLAIMED:

1. A system for identifying defects in a composite structure during fabrication thereof, comprising:

a camera for receiving images of the composite structure comprised of a plurality of adjacent composite strips of material;

a processor for processing said images and outputting a response identifying a defect based on said images; and

a light source positioned at an oblique angle relative to the composite structure for illuminating the composite structure, said light source having an infrared component that is differently reflected by defects in the composite structure than from portions of the composite structure that are defect free.

2. A system according to Claim 1, wherein said light source is an incandescent light with an infrared component.

3. A system according to Claim 1, wherein said camera is selected from the group consisting of a video camera and a fiber optic camera.

4. A system according to Claim 1, further comprising a filter for preventing substantially all ambient visible light from entering the camera.

5. A system according to Claim 1, wherein said light source comprises a plurality of light emitting diodes.

6. A system according to Claim 5, wherein said light emitting diodes are arranged in a cluster formation.

7. A system according to Claim 1, wherein the light source has a power output in the range of about 5W-25W.

8. A system according to Claim 1, wherein said light source includes incandescent light fiber.

9. A system according to Claim 1, wherein said light source comprises two arrays positioned such that an acute angle is defined therebetween.

10. A system according to Claim 1, wherein said oblique angle is about 45°.

11. A system according to Claim 1, wherein the plurality of adjacent composite strips are positioned in a common direction, and the light source is positioned substantially perpendicular to the common direction of the composite strips.

12. A system according to Claim 1, further comprising a marking device for indicating said defects on the composite structure.

13. A system according to Claim 12, wherein said marking device is an inkjet sprayer.

14. A system according to Claim 1, wherein said camera is capable of capturing images having a plurality of pixels, said images ranging from black through a plurality of shades of gray to white.

15. A system according to Claim 14, wherein said processor is capable of binarizing said images by setting all pixels representing a color darker than a predetermined gray level to one of black or white and setting all other pixels to the other of black or white.

16. A system according to Claim 15, further comprising an interface for permitting an operator to set a threshold representative of the predetermined gray level utilized by said processor to binarize the images.

17. A system according to Claim 1, wherein the composite structure comprises a plurality of composite strips, said composite strips being laid down by an automated collation process in which said composite strips are provided by a head unit and compacted to the underlying composite structure by a compaction roller, and wherein said camera and said light source are proximate the compaction roller.

18. A system according to Claim 17, wherein said camera and said light source are mounted on said head unit.

19. A system for identifying defects in a composite structure during fabrication thereof, comprising:

a camera for receiving images of the composite structure comprised of a plurality of adjacent composite strips;

a memory device for storing said images; and

a light source positioned at an oblique angle relative to the composite structure for illuminating the composite structure, said light source have an infrared component that is differently reflected by defects in the composite structure than from portions of the composite structure that are defect free.

20. A system according to Claim 19, wherein said light source is selected from the group consisting of an infrared light and an incandescent light.

21. A system according to Claim 19, wherein said camera is selected from the group consisting of a video camera and a fiber optic camera.

22. A system according to Claim 19, further comprising a filter for preventing substantially all ambient visible light from entering the camera.

23. A system according to Claim 19, wherein the camera is capable of distinguishing light from the light source and ambient visible light.

24. A system according to Claim 19, wherein said light source comprises a plurality of light emitting diodes.

25. A system according to Claim 24, wherein said light emitting diodes are arranged in a cluster formation.

26. A system according to Claim 19, wherein the light source has a power output in the range of about 5W-25W.

27. A system according to Claim 19, wherein said light source comprises two arrays positioned such that an acute angle is defined therebetween.

28. A system according to Claim 19, wherein said oblique angle is about 45°.

29. A system according to Claim 19, wherein the plurality of adjacent composite strips are positioned in a common direction, and the light source is positioned substantially perpendicular to the common direction of the composite strips.

30. A system according to Claim 19, further comprising a marking device for indicating said defects on the composite structure.

31. A system according to Claim 30, wherein said marking device is an inkjet sprayer.

32. A system according to Claim 19, wherein said camera is capable of capturing images by setting all pixels representing a color darker than a predetermined gray level to one of black or white and setting all other pixels to the other of black or white.

33. A system according to Claim 19, wherein the composite structure comprises a plurality of composite strips, said composite strips being laid down by an automated collation process in which said composite strips are provided by a head unit and compacted to the underlying composite structure by a compaction roller, and wherein said camera and said light source are proximate the compaction roller.

34. A system according to Claim 33, wherein said camera and said light source are mounted on said head unit.

35. A method of identifying defects in a composite structure during fabrication thereof, comprising:

positioning a camera proximate the composite structure;

illuminating the composite structure with an obliquely-mounted light source having an infrared component;

moving the camera and light source across the composite structure;

recording images of the composite structure; and

processing the images to identify defects in the composite structure.

36. A method according to Claim 35, further comprising marking the defects on the composite structure.

37. A method according to Claim 35, wherein illuminating the composite structure comprises illuminating the composite structure with a light selected from the group consisting of an infrared light and an incandescent light.

38. A method according to Claim 35, wherein positioning the camera comprises positioning a fiber optic camera perpendicular to the composite structure.

39. A method according to Claim 35, wherein processing the images comprises converting the images into dichotomous representations above or below a desired threshold.

40. A method according to Claim 35, wherein illuminating the composite structure comprises illuminating the work surface with two arrays of lights.

41. A method according to Claim 35, further comprising preventing substantially all ambient visible light from entering the camera.